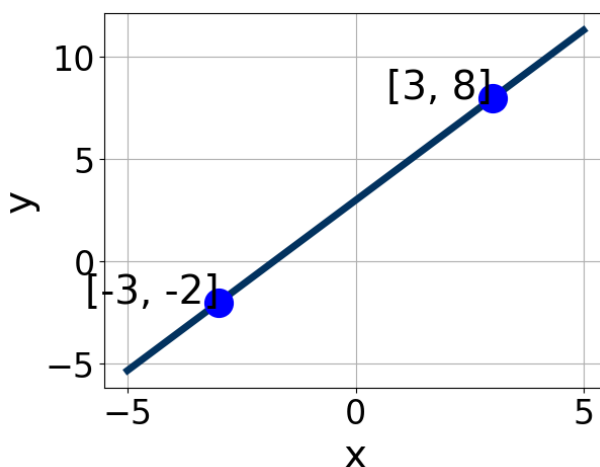


1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{7x - 8}{4} - \frac{9x + 5}{8} = \frac{5x - 7}{7}$$

- A.  $x \in [-68.2, -66.2]$
  - B.  $x \in [-2.23, 2.77]$
  - C.  $x \in [-22.2, -15.2]$
  - D.  $x \in [-5.2, -2.2]$
  - E. There are no real solutions.
- 

2. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [5, 8]$ ,  $B \in [1.24, 3.48]$ , and  $C \in [7.4, 9.5]$
  - B.  $A \in [-2.67, 3.33]$ ,  $B \in [-2.13, -0.61]$ , and  $C \in [-4.5, -2.9]$
  - C.  $A \in [5, 8]$ ,  $B \in [-3.76, -1.94]$ , and  $C \in [-9.2, -7.4]$
  - D.  $A \in [-2.67, 3.33]$ ,  $B \in [0.53, 1.28]$ , and  $C \in [1.3, 3.4]$
  - E.  $A \in [-7, -4]$ ,  $B \in [1.24, 3.48]$ , and  $C \in [7.4, 9.5]$
- 

3. Find the equation of the line described below. Write the linear equation

in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $9x - 5y = 11$  and passing through the point  $(-8, 8)$ .

- A.  $m \in [0.9, 2.6]$   $b \in [15, 18]$
  - B.  $m \in [0.9, 2.6]$   $b \in [-22.4, -20.4]$
  - C.  $m \in [-2.8, -1.2]$   $b \in [-9.4, -1.4]$
  - D.  $m \in [-0.1, 1.2]$   $b \in [21.4, 24.4]$
  - E.  $m \in [0.9, 2.6]$   $b \in [21.4, 24.4]$
- 

4. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-19x - 4) = -10(-2x - 15)$$

- A.  $x \in [1.14, 1.63]$
  - B.  $x \in [0.78, 1.1]$
  - C.  $x \in [-1.34, -0.95]$
  - D.  $x \in [-1.7, -1.34]$
  - E. There are no real solutions.
- 

5. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $5x + 3y = 4$  and passing through the point  $(-10, 7)$ .

- A.  $m \in [-2.68, -1.16]$   $b \in [-12.67, -1.67]$
  - B.  $m \in [-2.68, -1.16]$   $b \in [7.67, 12.67]$
  - C.  $m \in [-0.34, 2.7]$   $b \in [22.67, 24.67]$
  - D.  $m \in [-2.68, -1.16]$   $b \in [17, 21]$
  - E.  $m \in [-1.51, -0.19]$   $b \in [-12.67, -1.67]$
-

6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x + 9}{5} - \frac{-5x + 5}{2} = \frac{6x + 7}{4}$$

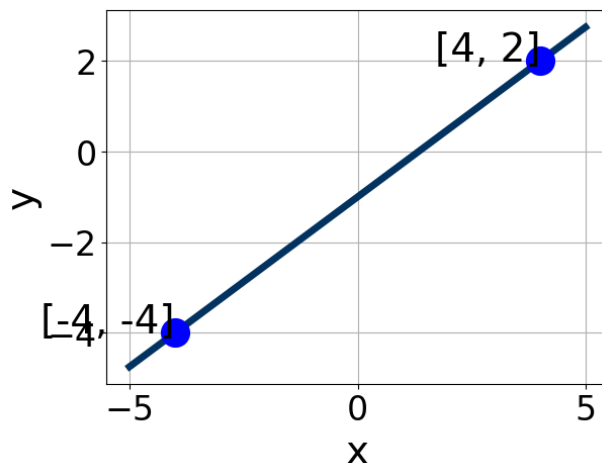
- A.  $x \in [-6.38, -3.38]$
  - B.  $x \in [7.5, 10.5]$
  - C.  $x \in [-2.61, 0.39]$
  - D.  $x \in [3.13, 7.13]$
  - E. There are no real solutions.
- 

7. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(-6, -3) \text{ and } (10, -8)$$

- A.  $m \in [-0.81, -0.1]$   $b \in [2.1, 3.4]$
  - B.  $m \in [-0.81, -0.1]$   $b \in [4.4, 7]$
  - C.  $m \in [-0.81, -0.1]$   $b \in [-19.2, -17]$
  - D.  $m \in [-0.81, -0.1]$   $b \in [-6.2, -4.4]$
  - E.  $m \in [-0.2, 0.42]$   $b \in [-11.9, -11.1]$
- 

8. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-1.7, 2.6]$ ,  $B \in [0.2, 2.1]$ , and  $C \in [-1.5, -0.4]$   
 B.  $A \in [-3.8, -1.5]$ ,  $B \in [2.6, 4.3]$ , and  $C \in [-5.2, -3.5]$   
 C.  $A \in [-1.7, 2.6]$ ,  $B \in [-3.2, -0.2]$ , and  $C \in [-0.4, 2.3]$   
 D.  $A \in [1.8, 3.1]$ ,  $B \in [-5.6, -1.8]$ , and  $C \in [2.8, 4.9]$   
 E.  $A \in [1.8, 3.1]$ ,  $B \in [2.6, 4.3]$ , and  $C \in [-5.2, -3.5]$

9. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$(5, 7)$  and  $(2, 6)$

- A.  $m \in [-0.2, 1.5]$   $b \in [-0.43, 3.03]$   
 B.  $m \in [-0.2, 1.5]$   $b \in [3.69, 4.44]$   
 C.  $m \in [-0.2, 1.5]$   $b \in [4.59, 5.78]$   
 D.  $m \in [-0.2, 1.5]$   $b \in [-6.33, -5.05]$   
 E.  $m \in [-2.3, -0.1]$   $b \in [6.03, 7.9]$

10. Solve the equation below. Then, choose the interval that contains the solution.

$$-6(-4x + 9) = -3(-8x - 17)$$

- A.  $x \in [-0.04, 0.05]$

- B.  $x \in [0.05, 0.1]$
  - C.  $x \in [-0.04, 0.05]$
  - D.  $x \in [-0.04, 0.05]$
  - E. There are no real solutions.
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